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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,643	07/15/2003	Junichi Ooka	240322US3	5235

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EXAMINER

BONCK, RODNEY H

ART UNIT PAPER NUMBER

3681

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/618,643	OOKA, JUNICHI	
	Examiner	Art Unit	
	Rodney H. Bonck	3681	<i>MLW</i>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>04/29/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following is a first action on the merits of application Serial No.10/618,643, filed July 15, 2003.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

Receipt is acknowledged of the Information Disclosure Statement filed April 29, 2004. The cited documents have been considered.

Specification

The disclosure is objected to because of the following informalities: In line 8 of page 10, it appears that "constrained" should be -- constrained --.

Appropriate correction is required.

Claim Objections

Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper

dependent form, or rewrite the claim(s) in independent form. It appears that claim 2 attempts to broaden a recitation of claim 1 and thus does not further limit claim 1. Specifically, claim 1 recites "an end part of an effective portion of said spline comes to at least an end surface of said clutch gear." Claim 2 recites "said end part of said effective portion of said spline is adjacent to said end surface of said clutch gear." The term "adjacent" is seen as broader than "comes to" since it would allow for some spacing between the spline and the end surface of the clutch gear.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear from the claim what specific steps are to be performed in carrying out the method of manufacturing a clutch gear. Thus the claim fails to particularly point out and distinctly claim the method.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7 are rejected under 35 U.S.C. 102(a and e) as being anticipated by Shimomura('017). The intermediate product shown in Fig. 6a and the embodiment shown in Fig. 7 of Shimomura are considered to anticipate the claimed clutch gear. Fig. 6a shows a clutch gear having a boss part with a spline 2 formed on an outer periphery of the boss, which is formed on the end surface of the clutch gear having jaw teeth 1. The boss part is formed integrally and coaxially with the clutch gear by forging and has a diameter that is shorter than that of the clutch gear. The spline comes to the end surface of the clutch gear. The end surface of the clutch gear includes a ring-like groove 6 having an inner wall diameter nearly equal to that of the boss part and the spline extends into the groove. The outer wall of groove 6 has an inclined surface decreasing the width of the groove as it approaches the bottom of the groove. Similarly in Fig. 7, Shimomura shows a clutch gear having a boss part with a spline 1 formed on an outer periphery of the boss, which is formed on the end surface of the clutch gear having jaw teeth 2. The boss part is formed integrally and coaxially with the clutch gear by forging and has a diameter that is shorter than that of the clutch gear. The spline comes to the end surface of the clutch gear. The end surface of the clutch gear includes a ring-like groove 7 having an inner wall diameter nearly equal to that of the boss part and the spline extends into the groove. The outer wall of groove 7 has an

inclined surface decreasing the width of the groove as it approaches the bottom of the groove. The clutch gear disclosed by Shimomura is forged by pressing a workpiece into die. Thus, insofar as definite, the claimed method is anticipated by the Shimomura patent.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoguchi(EP 0 581 483 A1). Hoguchi discloses a clutch gear 14 having a boss part with a spline 16 formed on an outer periphery of the boss, which is formed on the end surface of the clutch gear having jaw teeth 17. The boss part is formed integrally and coaxially with the clutch gear by forging and has a diameter that is shorter than that of the clutch gear. The spline comes to the end surface of the clutch gear. The end surface of the clutch gear includes a ring-like groove (formed by projection 9b of the punch 9) having an inner wall diameter nearly equal to that of the boss part and the spline extends into the groove. The outer wall of the groove has an inclined surface decreasing the width of the groove as it approaches the bottom of the groove. The clutch gear disclosed by Hoguchi is forged by pressing a workpiece into die. Thus, insofar as definite, the claimed method is anticipated by Hoguchi.

Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ohoka('089) and Hoguchi('714) show similar clutch gears with a

splined boss part. The Japanese publication of Ooka Giken KK(JP 11-300447) discloses a forging process for a clutch gear.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney H. Bonck whose telephone number is (703)-308-2904. The examiner can normally be reached on Monday-Friday 7:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (703)-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Rodney H. Bonck
Primary Examiner
Art Unit 3681

rhb
June 25, 2004